TABLE OF CONTENTS

Volume 61

ARTICLES

BALDOCCHI, DENNIS / A Lagrangian Random-Walk Model for Simulating Water Vapor, CO_2 and Sensible Heat Flux Densities and Scalar Profiles over and within a Soybean Canopy 113

BRÜMMER, BURGHARD, BIRGIT RUMP and GOTTFRIED KRUSPE / A Cold Air Outbreak near Spitsbergen in Springtime – Boundary-Layer Modification and Cloud Development 13

COOPER, D. I., W. E. EICHINGER, D. B. HOLTKAMP, R. R. KARL JR., C. R. QUICK, W. DUGAS, and L. HIPPS / Spatial Variability of Water Vapor Turbulent Transfer within the Boundary Layer 389

FLESCH, T. K. and J. D. WILSON / A Two-Dimensional Trajectory-Simulation Model for Non-Gaussian, Inhomogeneous Turbulence within Plant Canopies 349

GRISOGNO, BRANKO and ROBERT E. KEISLAR / Radiative Destabilization of the Nocturnal Stable Atmospheric Boundary Layer over the Desert 1

KADER, B. A. / Determination of Turbulent Momentum and Heat Fluxes by Spectral Methods 323

KITTAS, C. / Influence d'un Brise-vent Sur Les Pertes Convectives et Radiatives d'une Serre 99

KONDRATYEV, K. YA., V. G. BONDARENKO, and V. I. KHVOROSTYANOV / A Three-Dimensional Numerical Model of Cloud Formation and Aerosol Transport in an Orographically Inhomogeneous Atmospheric Boundary Layer 265

LHOMME, J. P., N. KATERJI, and J. M. BERTOLINI / Estimating Sensible Heat Flux from Radiometric Temperature over Crop Canopy 287

MELAS, D. and H. D. KAMBEZIDIS / The Depth of the Internal Boundary Layer over an Urban Area under Sea-Breeze Conditions 247

MERONEY, R. N. and W. H. MELBOURNE / Operating Ranges of Meteorological Wind Tunnels for the Simulation of Convective Boundary Layer (CBL) Phenomena 145

OTTERMAN, J., T. W. BRAKKE and J. SUSSKIND / A Model for Inferring Canopy and Underlying Soil Temperatures from Multi-Directional Measurements 81

SHAW, ROGER H. and ULRICH SCHUMANN / Large-Eddy Simulation of Turbulent Flow above and within a Forest 47

SUGITA, MICHIAKI and WILFRIED BRUTSAERT / The Stability Functions in the Bulk Similarity Formulation for the Unstable Boundary Layer 65

VILÀ-GUERAU DE ARELLANO, JORDI and PETER G. DUYNKERKE / Influence of Chemistry on the Flux-Gradient Relationships for the NO-O_3-NO_2 System 375

WILLIAMS, A. G. and J. M. HACKER / The Composite Shape and Structure of Coherent Eddies in the Convective Boundary Layer 213

RESEARCH NOTES

HASSE, LUTZ / On the Contribution of Spray Droplets to Evaporation 309
HIGNETT, P. / Corrections to Temperature Measurements with a Sonic Anemometer 175
MORIARTY, W. W. / Tether Corrections for Tethered Balloon Wind Measurements 407
PARASNIS, SURENDRA S. / Observations of Reversal of Mixing Ratio in the Atmospheric Boundary Layer over the Arabian Sea 419
WEIMEI, JIANG, WU XIAOMING, and ZHOU JINGNAN / A Higher Order Closure Model Applied to Research on the Structure of the Thermal Internal Boundary Layer (TIBL) 301

CORRESPONDENCE

MYLNE, KENNETH R. / The PDF of Concentration Fluctuations – Comments on Yee (1990) and Yee (1991) 189
YEE, EUGENE / Reply to the 'Comments on: the PDF of Concentration Fluctuations' by Kenneth R. Mylne 195

BOOK REVIEW

TRECHNIKOV, A. A. and ZILITINKEVICH, S. S. (eds.) *Hydrothermodynamic Interaction between Lake and Atmosphere* (G. DJOLOV) 205
RASCHKE, E., STUHLMANN, R., PALZ, W. and SREEMERS, T. C. *Solar Radiation Atlas of Africa* (G. D. DJOLOV) 315

Announcement 427

Volume Contents 429

Author Index 431

Subject Index 433

The Use of the "SPACEKAP" Style File for Delivering Manuscripts in LaTeX 207, 317, 435